

CLAIM AMENDMENTS

A listing of an entire set of claims 1-10 is submitted herewith per 37 C.F.R. §1.121. This listing of claims 1-10 will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method for data transmission in a power supply network, [[wherein]] the method comprising:
receiving data transmitted on a particular phasing line (11) of the power supply network [[is received]] at a first transceiver; and
[[then re-transmitted, characterized in that the data is re-transmitted]] re-transmitting the received data at a second transceiver on at least one phasing line (12, 13) different from the said phasing line (11).
2. (Original) A method as claimed in claim 1, characterized in that the data is re-transmitted on all phasing lines (11 – 13).
3. (Previously Presented) A method as claimed in claim 1, characterized in that the data is re-transmitted on the phasing lines (11 – 13) on which its original signal strength lay below a threshold value.
4. (Previously Presented) A method as claimed in claim 1, characterized in that the data is re-transmitted only on the phasing lines (11 – 13) to which the addressees (20 – 25) of the data are connected.
5. (Previously Presented) A method as claimed in claim 1, characterized in that a preparation, in particular a channel equalization and channel matching, is undertaken before the re-transmission.

6. (Original) A device (1) for data transmission in a power supply network, comprising a receiver (3 – 5) for receiving data transmitted on a first phasing line (11 – 13) of the power supply network, and a transmitter (3 – 5) for transmitting data on a second phasing line (12 – 13) of the power supply network, characterized in that the first and second phasing lines are different.
7. (Original) A device as claimed in claim 6, characterized in that it comprises a receiver and a transmitter (3 – 5) for each phasing line (11 – 13) of the power supply network, and that all receivers and transmitters are coupled together by a control unit (2).
8. (Previously Presented) A device as claimed in claim 6, characterized in that it comprises a storage device for the temporary storage of data transmitted on the phasing lines (11 – 13) of the power supply network.
9. (Previously Presented) A device as claimed in claim 6, characterized in that it is equipped with additional transmitting and receiving modules for connection to other networks with different transmission methods.
10. (Previously Presented) A device as claimed in claim 6, characterized in that it is equipped with an additional network filter for separation of an in-home network from an external network, wherein a further transmitter and receiver are preferably integrated on the external side, and selected data is routed past the filter.
11. (New) A device for data transmission in a power supply network including a first phasing line and a second phasing line different from the first phasing line, the device comprising:
a first transceiver coupled to the first phasing line of the power supply network to receive data transmitted on the first phasing line; and

a second transceiver coupled to a second phasing line of the power supply network to retransmit the data received by the first transceiver on the second phasing line.

12. (New) A device as claimed in claim 11, further comprising:

a control unit coupled to the first transceiver and the second transceiver to control a retransmission by the second transceiver of the data on the second phasing line.

13. (New) A device as claimed in claim 12, wherein the control unit further controls a retransmission by the first transceiver of the data on the first phasing line.

14. (New) A device as claimed in claim 12, wherein the control unit controls the retransmission by the second transceiver of the data on the second phasing line based on an original signal strength of the second phasing line being below a threshold value.

15. (New) A device as claimed in claim 12, wherein the control unit controls the retransmission by the second transceiver of the data on the second phasing line based on the second phasing line being connected to an address of the data.

16. (New) A device as claimed in claim 12, wherein the control unit prepares the data for retransmission by the second transceiver of the data on the second phasing line.

17. (New) A device as claimed in claim 16, wherein a preparation of the data by the control unit for retransmission by the second transceiver of the data on the second phasing line includes at least one of a channel equalization and a channel matching.

18. (Previously Presented) A device as claimed in claim 11, further comprising:
a storage device for a temporary storage of all data transmitted on the phasing lines of the power supply network.
19. (Previously Presented) A device as claimed in claim 11, characterized in that it is equipped with additional transceiver modules for connection to other networks with different transmission methods.
20. (Previously Presented) A device as claimed in claim 11, characterized in that it is equipped with an additional network filter for separation of an in-home network from an external network, wherein a further transceiver is preferably integrated on the external side, and selected data is routed past the filter.